



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,227	06/16/2006	Paul J. Caronia	63847A US	8222
109 7590 08/07/2008 The Dow Chemical Company Intellectual Property Section P.O. Box 1967 Midland, MI 48641-1967				
EXAMINER RABAGO, ROBERTO				
ART UNIT		PAPER NUMBER		
1796				
MAIL DATE		DELIVERY MODE		
08/07/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/583,227

**Applicant(s)**

CARONIA ET AL.

**Examiner**

Roberto Rábago

**Art Unit**

1796

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14, 16, 17 and 24-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14, 16, 17 and 24-26 is/are rejected.
- 7) ☒ Claim(s) 27 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 1-14, 16, 17 and 24-27 are objected to. The word "improved" in each claim is an opinion statement regarding patentability or desirability over prior art, and is not a substantive feature or proper element of the claims.

### ***Claim Rejections - 35 USC § 112***

2. Claims 1-14, 16, 17 and 24-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention for the reasons set forth in item 2(c) of the Office action mailed 7/2/2007. In claims 1, 14, 16, 17, 24 and 26 (and all claims dependent thereon), the intended scope of "nominal" is indefinite.

Applicant's arguments filed 1/4/2008 have been fully considered but they are not persuasive. Applicants' argument fails to provide any clear basis to determine the intended temperature or temperature range which constitutes the scope of "nominal," and no response has been made regarding the scope of "nominal processing rate" of claim 16. Applicants argue that one of ordinary skill in the art can determine said nominal temperatures from the crosslinking temperature profile, apparently based upon nothing more than arbitrary judgment, but no specific criteria for clearly determining the scope of any nominal ranges have been disclosed or argued. The specification discusses a nominal crosslinking temperature profile at page 1, and cites Figure 1 as

illustrative. Applicants' argument reiterates this disclosure; however, there is nothing in Figure 1, or the associated discussion, which would allow the ordinary skilled worker to determine where along the temperature continuum the ranges for nominal melt processing temperature and nominal crosslinking temperature begin and end. Since the processing temperatures are apparently the central features of the claimed process, it is essential that those of ordinary skill in the art have a clearly defined basis to determine the metes and bounds of the claims.

***Claim Rejections - 35 USC § 102***

3. Claims 1-9, 11, 14, 16, 17, and 24-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Debaud et al. (US 20050192419) for the reasons set forth in item 4 of the Office action mailed 7/2/2007.
4. Claims 1-9, 11, 12, 14, 16, 17, and 24-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Debaud et al. (US 20040195550) for the reasons set forth in item 5 of the Office action mailed 7/2/2007.
5. Applicant's arguments filed 1/4/2008 have been fully considered but they are not persuasive. Applicants argue that the reference process occurs at the nominal melt processing temperature, while the claimed process occurs at higher temperatures. This argument relies on a clear understanding of the limits of the term "nominal" with respect to melt processing temperature, crosslinking temperature and melt processing rate.

Art Unit: 1796

However, for reasons advanced above, no basis for establishing the limits of these ranges has been disclosed in the specification. During patent examination, claims are given their broadest reasonable interpretation. Since applicants have not traversed the suggestion in the prior Office action that the meaning of "nominal" may include "minimum," the claims appear to include this scope, and therefore the reference process is clearly within the claimed scope.

### ***Double Patenting***

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-3, 5, 11, 12, 14, 16 and 17 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-17

of copending Application No. 10/583,295. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims are anticipated by or obvious over the copending claims. Copending claims 15 and 16 define an invention within the scope of the instant independent claims. The features of the remaining dependent claims are recited in the copending dependent claims, except for instant claims 2, 3 and 5. However, selection of the claimed polymers would be obvious over the copending claims because the claimed polymers constitute the majority of polymers which are conventionally crosslinked via free-radical mechanism. Selection of the claimed free-radical inducers would be obvious because applicants have set forth virtually the entire scope of conventional free radical inducing species which are conventionally used in cross linking.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberto Rábago whose telephone number is (571) 272-1109. The examiner can normally be reached on Monday - Friday from 8:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1796

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Roberto Rábago/  
Primary Examiner  
Art Unit 1796

RR  
August 2, 2008